

## Sanga, Ravi

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**From:** Palmieri, Anthony <anthony.palmieri@aecom.com>  
**Sent:** Wednesday, May 01, 2019 2:50 PM  
**To:** Hall, James C CIV; jason.palmer@aecom.com  
**Cc:** Sanga, Ravi; Hoffman, Erika  
**Subject:** RE: Pier 36B sampling update

Good afternoon everyone,

Please see the responses below in red text and let me know if you have any additional questions.

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-----Original Message-----

From: Hall, James C CIV <James.C.Hall2@uscg.mil>  
Sent: Wednesday, May 1, 2019 13:22  
To: Palmer, Jason (Seattle) <Jason.Palmer@aecom.com>  
Cc: Palmieri, Anthony <anthony.palmieri@aecom.com>; Sanga, Ravi <Sanga.Ravi@epa.gov>; Hoffman, Erika <Hoffman.Erika@epa.gov>  
Subject: Pier 36B sampling update

Hello Jason,

I had a discussion about the shallow sediments at the 7 locations along Pier 36B with Ravi and Erika and I want to clarify/verify a few items. Can you please respond to this email and include Ravi and Erika in the response?

1. There are 3 locations (Berth 12, Pier 17 and Pier 19) that have material for a composite core from 0 -2 feet. (based on our phone call just now it sounds like this is not correct for berth 12)

**Locations Pier 17 and Pier 19:** Material from 0-2 feet were composited as one sample. There was limited recovery (due to the low density of the material) in the 0-1 foot interval, which was observed to be the same material encountered in the 1-2 foot interval, so it was composited to provide adequate volume for all prescribed lab analyses.

**Location Berth 12:** Material from 2-4 feet were composited as one sample. There was no recovery from the 0-2 foot interval (based on core barrel drive observations compared to density/lithologic changes observed in the core material) and limited recovery from 2-3 feet. The 2-3 foot interval was observed to be the same material encountered at the 3-4 foot interval, so it was composited to provide adequate volume for all prescribed lab analyses.

2. We have attempted 3 distinct locations at pier 20, berth 7 and berth 10 locations, within a 25 foot radius of the original attempt per the QAPP

This is correct. Three attempts were made at each of these locations utilizing the full extent of the 25 foot radius as prescribed in the QAPP. Significant amounts of debris were observed at each of the primary and step-out locations.

3. Did we retain the core from the non-continuous 60 percent recovery from pier 20 location?

The first attempt resulting in 61% core recovery was not retained. Due to the significant amount of debris present at this location, lack of observable surface material/other distinct layers, and the broken/discontinuous nature of the core, it was impossible to determine what depth the material in the core represented.

4. Please confirm that all sample intervals are properly preserved/stored for potential future analysis. It seems very likely this will be needed based on the observed sheen.

All collected sample intervals have either been submitted for analysis or archived as specified in the QAPP.

Please feel free to correct any information here that is not correct or provide clarifications.

Thank You,  
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